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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/086,473	02/28/2002	Andreas F. Kotowski	RAPI-011	2361

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EXAMINER	
NGUYEN, MINH T	

ART UNIT	PAPER NUMBER
2816	

DATE MAILED: 11/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/086,473	KOTOWSKI ET AL.	
	Examiner	Art Unit	
	Minh Nguyen	2816	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 October 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *10-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *10-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *28 February 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/13/04 has been entered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3 and 14-17 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 4,974,247, issued to Friddell.

As per claim 15, Friddell discloses an apparatus (Fig. 1) to detect concealed items on or in an object (see the abstract), comprising:

an x-ray source (12) and a scanner (18), the x-ray source to produce a pencil beam (column 5, lines 22-23) to an object (16);

a detector (34) to detect x-rays scattered (column 5, last line, column 6, lines 1-19) as a result of interacting with the object (16) and a low Z material panel (32, see column 6, line 42, i.e., low atomic sheet material), the object 16 is clearly located between the detector (34) and the panel (32).

The recited limitation the detector differentiating x-rays back scattered by the object from those back scattered by the low Z material panel is met as explicitly disclosed in column 5, last line and column 6, lines 1-4, i.e., "interacts with object 16 and is back scattered by the object in a second direction, indicated by line 28", in combination with the teaching discussed in column 1, lines 12-15, "using backscattered radiation to generate a radiographic image of the object". In other words, Friddel discloses a known method which is the radiation backscattered from the object is detected for those areas covered by the object, the radiation backscattered from the low Z material is also detected. From these results, the radiation image is differentiated.

As per claim 16, the recited limitation reads on the processor (38).

As per claim 17, the recited limitation reads on the display unit (42).

As per claim 1, this claim is merely a method to operate the apparatus noted in claim 15, since Friddell teaches the apparatus, he inherently teaches the method to operate.

As per claims 2-3, rejected for the same reasons noted in claims 16-17, respectively.

As per claim 14, same rejection as claim 1.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 4-13 and 18-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 4,974,247, issued to Friddell.

As per claim 18, Friddell discloses the apparatus as discussed in claim 15 but he does not explicitly disclose the low Z material is made of polyethylene as called for in the claim.

However, as ruled by the court, when the structure of the apparatus (overall conditions) are met, changing the material (the low Z material) from one to another to obtain the optimum condition is not patentable since the practice can be done by an average person skilled in the art.

It would have been obvious to one skilled in the art at the time of the invention was made to modify the Friddell panel (32) using a certain material such as polyethylene for the motivation to obtain optimum images shown in the display when the Friddel's apparatus is used to detect a certain, known Z object.

As per claims 19-20, these claims are rejected for the same reasons and motivations as discussed in claim 18.

As per claim 21, Friddell does not explicitly disclose a radiation shield as called for in the claim. However, this limitation is seen as obvious by a person skilled in the art at the time of the invention was made since human being are known for being harmed when exposed to x-ray beams, i.e., the apparatus needs radiation shields for safety purpose.

As per claims 22-25, materials such as steel, lead used as absorbing materials for radiation shield and the selection of the thickness of the materials are well-known in the art.

As per claim 26-27, adjusting the positions of the low Z material panels to obtain the optimum images is seen as an obvious adjusting for the same motivation discussed in claim 18.

As per claims 4-13, same rejections as claims 18-27.

Response to Arguments

4. Applicant's argument filed on 10/13/04 has been fully considered but it is not persuasive.

The applicant argues that Friddell does not make a distinction between backscattered by the object 16 and the illuminator 32 as required by the newly added limitation to the claim.

As discussed in the preceding rejection, the newly added limitation is met as disclosed in column 5, last line and column 6, lines 1-4, "interacts with object 16 and is back scattered by the object in a second direction, indicated by line 28", in combination with the teaching discussed in column 1, lines 12-15, "using backscattered radiation to generate a radiographic image of the object". In other words, Friddel discloses a known method which is the radiation backscattered from the object is detected for those areas covered by the object, the radiation backscattered from the low Z material is also detected. From these results, the radiation image is differentiated.

It appears the applicant is arguing that in Friddell, the detection is based on the radiation backscattered from the object, the radiation back scatted from the low Z material after the radiation passing through the object whereas the claim calls for the radiation backscattered from the object only and the radiation back scatted by the low Z material only. The examiner agrees Friddel also discloses this method and he further argues that this method is better for object recognition than the conventional method in which he discloses as discussed in the preceding

paragraph. However, the claim is still anticipated by the previous discussed method even though it seems to him it is inferior to the later method.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Nguyen whose telephone number is **571-272-1748**. The examiner can normally be reached on Monday, Tuesday, Thursday, Friday 7:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on 571-272-1740. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

10/29/04

Minh Nguyen
Primary Examiner
Art Unit 2816